

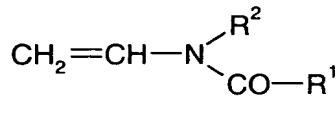
We claim:-

1. An aqueous composition comprising at least one finely divided filler and at least one water-soluble amphoteric copolymer which is obtainable by copolymerization of a monomer mixture comprising

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a) at least one N-vinylcarboxamide of the formula I

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where R^1 and R^2 , independently of one another, are H or C_1 - to C_6 -alkyl,

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b) at least one monomer which is selected from monoethylenically unsaturated sulfonic acids, phosphonic acids, phosphoric esters and derivatives thereof,

c) if appropriate, at least one monomer which is selected from monoethylenically unsaturated mono- and dicarboxylic acids, the salts thereof and dicarboxylic anhydrides,

d) if appropriate, at least one monoethylenically unsaturated monomer which differs from the components a) to c) and is free of nitrile groups, and

20 e) if appropriate, at least one compound which has at least two ethylenically unsaturated double bonds in the molecule,

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with the proviso that the monomer mixture contains at least one monomer b) or c) having at least one free acid group and/or an acid group in salt form,

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and subsequent partial or complete hydrolysis of the $-\text{CO}-\text{R}^1$ groups from the monomers I incorporated in the form of polymerized units in the copolymer.

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2. A composition according to claim 1, wherein N-vinylformamide is used as component a).

3. A composition according to any of the preceding claims, wherein component b) is selected from vinylsulfonic acid, allylsulfonic acid, methallylsulfonic acid, sulfoethyl acrylate, sulfoethyl methacrylate, sulfopropyl acrylate, sulfopropyl methacrylate, 2-hydroxy-3-acryloyloxypropylsulfonic acid, 2-hydroxy-3-

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methacryloyloxypropylsulfonic acid, styrenesulfonic acid,
acrylamidomethylenephosphonic acid, 2-acrylamido-2-methylpropanesulfonic
acid, vinylphosphonic acid, $\text{CH}_2=\text{CH}-\text{NH}-\text{CH}_2-\text{PO}_3\text{H}$, monomethyl
5 vinylphosphonate, dimethyl vinylphosphonate, allylphosphonic acid, monomethyl
allylphosphonate, dimethyl allylphosphonate, acrylamidomethylpropylphosphonic
acid, (meth)acryloyethylene glycol phosphate, monovinyl phosphate, monoallyl
phosphate, the salts of the abovementioned acids and mixtures thereof.

10 4. A composition according to any of the preceding claims, wherein the monomer
mixture used for the polymerization contains at least one compound of
component b) and at least one compound of component c), in each case having
a free acid group or an acid group in salt form.

15 5. A composition according to any of the preceding claims, wherein the hydrolyzed
copolymers contain

20 - from 1 to 98, preferably from 1 to 75, mol% of vinylcarboxamide units,
- from 1 to 98, preferably from 1 to 55, mol% of units of monoethylenically
unsaturated sulfonic acids, phosphonic acids, phosphoric esters and
derivatives thereof,
- from 0 to 80, preferably from 0.1 to 45, mol% of units of monoethylenically
unsaturated mono- and dicarboxylic acids, the salts thereof and
dicarboxylic anhydrides,
- from 1 to 98, preferably from 1 to 55, mol% of vinylamine and/or amidine
25 units,
- up to 30 mol% of units of other monoethylenically unsaturated compounds
which are free of nitrile groups.

30 6. A composition according to any of the preceding claims, wherein the hydrolyzed
copolymers contain

35 - from 5 to 70 mol% of vinylcarboxamide units,
- from 3 to 30 mol% of units of monoethylenically unsaturated sulfonic acids,
phosphonic acids and salts thereof,
- from 0 to 45 mol% of units of acrylic acid, methacrylic acid, salts and
mixtures thereof,
- from 10 to 50 mol% of vinylamine units in salt form and/or amidine units.

40 7. A composition according to any of the preceding claims, which contains from 1 to
50, preferably from 10 to 40, % by weight of at least one finely divided filler.

8. A composition according to any of the preceding claims, which contains from 0.1
to 5, preferably from 0.25 to 3, % by weight, based on fillers, of amphoteric water-
soluble copolymers.

9. A composition according to any of the preceding claims, wherein the amphoteric copolymers have an excess anionic or cationic charge or the same quantity of cationic and anionic charge.
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10. A process for the preparation of an aqueous composition as defined in any of claims 1 to 9, in which from 0.1 to 5% by weight, based on filler, of at least one copolymer as defined in any of claims 1 to 6 are added to an aqueous slurry which contains at least one finely divided filler and, if appropriate, at least one dispersant, or the aqueous slurry of at least one finely divided filler is introduced into an aqueous solution of said amphoteric copolymer and the constituents are brought in each case into intimate contact with one another.
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11. A process according to claim 12, wherein the electrophoretic mobility of the finely divided filler particles of the aqueous slurry is negative or not more than zero at a pH of 7.
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12. The use of an aqueous composition as defined in any of claims 1 to 9 as an additive for the paper stock in the production of filler-containing paper, filler-containing cardboard or filler-containing board by draining.
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13. A paper, board or cardboard modified by adding an aqueous composition as defined in any of claims 1 to 9.